

For a second consecutive year, below-average cumulative precipitation and above-average temperatures are expected in the 2021-2022 wet season

KEY MESSAGES

- Below-average precipitation was observed throughout much of the country in the period October 1 – November 5, 2021 (Figure 1).
- A [La Niña advisory](#) is [forecast](#) to be in effect through the end of the 2021-2022 winter season. [La Niña increases the likelihood of below-average precipitation in the wet season](#). Consistent with this, below-average cumulative precipitation (Figure 2) and above-average temperatures are forecast for December 2021 - February 2022.
- Below-average precipitation early in the 2021-2022 wet season may lead to less vigorous winter wheat planting activity in October and November (Figure 3), leading to than normal planted area under irrigated wheat by the end of wet season.
- The combination of historically low reservoir levels (Figure 4), forecasts of below-average precipitation (Figure 2), and diminished snowpack development is expected to reduce water availability for irrigation in Spring and Summer 2022. These conditions increase the likelihood of below-normal wheat production at the end of the first and second seasons (Figure 3).

Figure 1. October 1, 2021 – November 5, 2021 CHIRPS precipitation percent of average. Source: UCSB/CHC.

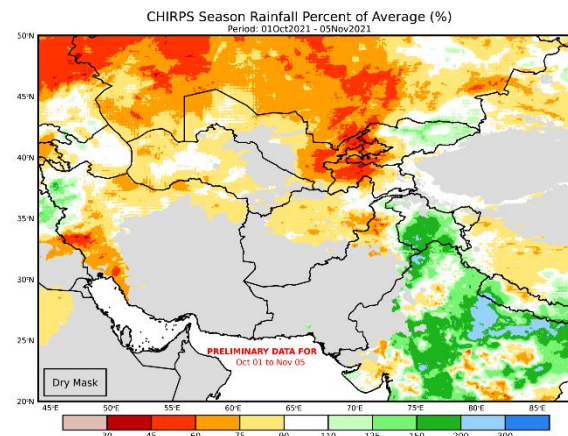
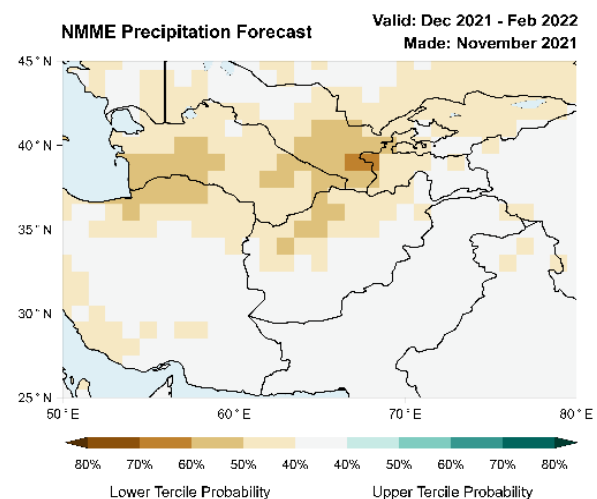


Figure 2. North American Multi-Model Ensemble (NMME) precipitation forecast for December 2021 - February 2022 made in November 2021. Brown shading indicates the likelihood of precipitation in the lower tercile and green shading indicates the likelihood of precipitation in the upper tercile. Source: NOAA.



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- The below-average precipitation that is expected through the end of April 2022 will adversely affect wheat cultivation and cause pastoral vegetation to be stressed (Figure 3). Northern rainfed production is at risk of being impacted by below-average precipitation at critical points in the growing season.
- Reduced water availability presents a particular risk for second season irrigated crop production in 2022 (Figure 3), as snowpack is expected to be depleted earlier than usual, and second season crops will require more water due to hot and anomalously dry conditions. Increased dependence on groundwater for irrigation will adversely affect crop production since not all farmers have access to this alternative.

Figure 3. Afghanistan crop calendar.

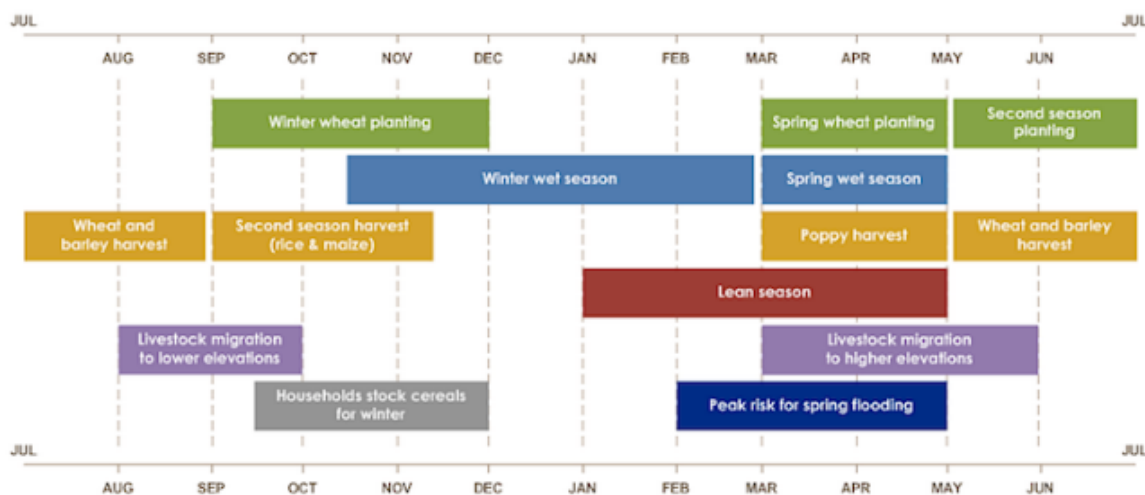


Figure 4. Time evolution of Kajaki Reservoir water level in meters. Source: Database for Hydrological Time Series of Inland Waters.

